

CIVIL WAR INFLATION

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CIVIL WAR

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The Civil War

Inflation

Excerpts from newspapers and other sources

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CIVIL WAR ROUND TABLE

Washington, D.C.

CIVIL WAR INFLATION

(Selected Extracts)

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February 11, 1975

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A. PRICES AND THE MONEY SUPPLY

Figure 15-1 shows the historical ups and downs of wholesale prices. Each war is clearly marked by a peak. At first glance there seem to be no general upward or downward trends. But the chart of consumer prices in Fig. 15-2 (page 282) pinpoints the general upward trend of prices in this century. The value of the dollar—as measured by what it can buy—has been about cut in half since today's college student was born.

As an omen for the future, note one crucially significant fact: After World War II there was no decline in prices at all comparable with what had followed previous wars. Wages and prices seem to have become *sticky as far as downward movement are concerned*; also, government has become quick to act to stem any depression that begins to get under way. When the Vietnam war accelerated the rate of creeping inflation, the target for government policy was not price stability, for that was considered beyond the realm of feasibility. Instead, the target was to halve the rate of price increase, to bring it from 4 to 6 per cent per year down to 2 to 4 per cent. If prices rise in good times and scarcely fall at all in bad times, what is their indicated long-term direction? The answer is plain.

INFLATION, DEFLATION, INCOME REDISTRIBUTION AMONG GROUPS

First, some definitions will be useful.

By *inflation* we mean a time of generally rising prices for goods and factors of production—rising prices for bread, cars, haircuts; rising wages, rents, etc. By *deflation* we mean a time when most prices and costs are falling.¹

Neither in inflation nor in deflation do prices all move in the same direction or in exactly the same proportion. As a result of changes in relative prices and in total spending, the two processes of inflation and deflation cause definite and characteristic changes in (1) the distribution of income among economic classes, and (2) total output.

Unforeseen inflation tends to favor debtors and profit receivers at the expense of creditors and fixed-income receivers. Deflation has the opposite effect.

Suppose you lend \$1,000 today and are paid back one year from now. If in meantime prices have doubled, then your debtor will be paying back only one-half as much real purchasing power as you gave him. If prices were to increase a trillionfold as they did in the German inflation of 1920-1923, then the wealth of creditors would be wiped out.

¹"Deflation" sometimes has a secondary meaning too, namely, a drop in real output and an increase in unemployment regardless of price behavior. And even our simple definition of inflation as rising prices will occasionally need modifying; thus in 1947 when wartime price controls were removed, prices shot upward. Did stability of prices mean no inflation before then? Hardly. As scarce goods increased from 1942 to 1947, we were having "suppressed inflation." The 1947 price rise was primarily a "symptom" of the disease we were already experiencing.

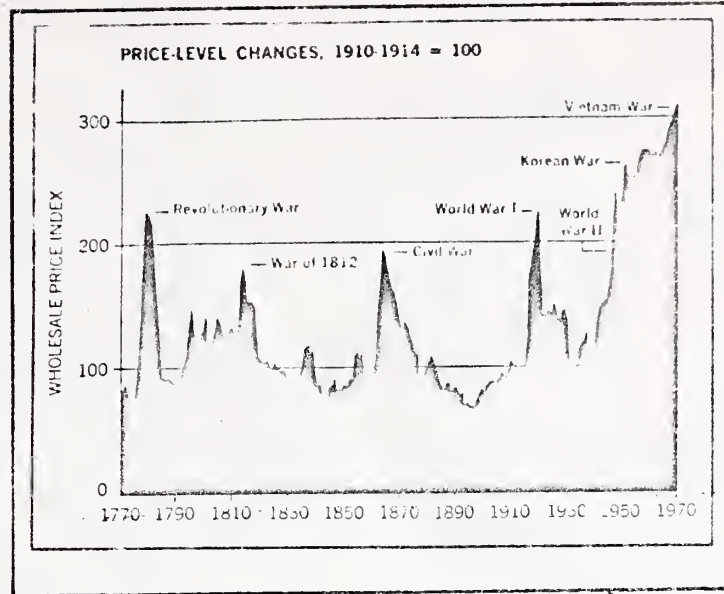


FIG. 15-1

Wildest inflations historically come with periods of war

After each major war in the country's history, there has been slightly less of a price drop. Indeed, after World War II there was no significant drop. For 60 years the general price trend—abroad as well as here—has been biased upward.

be completely wiped out. This actually happened to German university endowments and life-insurance assets.

After 1939 an American who earned 6 per cent yearly on a mortgage found that, as a result of World War II, he was not even holding his own as far as the *real purchasing power* of the dollar was concerned. United States government savings bonds bought for \$75 in 1970 pay off about \$100 in 1976. But will one hundred 1976 dollars have as much purchasing power as the seventy-five 1970 dollars did at the original time they were lent?

On the other hand, one who invests his money in real estate, common stocks, or sacks of flour makes a great money profit during unforeseen inflation. The dollar volume of business sales shoots up. Prices rise between the time businessmen buy and sell their merchandise. Fixed or overhead costs remain the same; other costs rise, but not so fast as prices. For all these reasons profits increase—often more than the cost of living. In periods of great inflation, every reckless fool is a great financier.

In time of deflation, the shoe is on the other foot. Creditors and fixed-income receivers tend to gain at the expense of debtors and profit receivers. If prices fall between the time that a creditor lends money and is repaid, then he gets back more purchasing power than he lent. Between the time that a merchant buys and sells goods, he will have to take a loss.

The schoolteacher who keeps her job finds that her real income has increased. The widow who withstood the temptation to buy common stock during the boom and instead put all her money into gilt-edge government bonds finds herself better off. At the same time, the government finds the real burden of its public debt goes up relative to tax collections and national income. A hoarder who earns no money interest on his mattress cache finds the real value of his wealth increasing every day as prices fall. If prices fall at the rate of 10 per cent per year, he is being rewarded for his

antisocial act of hoarding at a 10 per cent rate of interest in real terms, while the businessman who is foolish enough to give someone a job may find that he cannot even get back his wage outlay, much less earn a profit.

Modern research suggests that the greatest redistribution of income resulting from inflation is from older people to younger people. The dollars one puts aside at 25 for retirement at 70 often shrink in purchasing power: if prices rise at an average rate of about 3 per cent per year, the real purchasing power of a dollar held for 45 years will halve and halve again in that period.

Anticipated inflation Once an inflation has gone on for a long time and is no longer "unforeseen," an allowance for a price rise will gradually get itself built into the market interest rate. Thus, once we all expect prices to rise at 4 per cent per year, my pension funds invested in bonds and mortgages will tend to pay me 8 per cent rather than 4 per cent. This adjustment of interest rates to chronic inflation has been observed in Brazil, Chile, and indeed in almost all other countries with a long history of rising prices.

EFFECTS OF CHANGING PRICES ON OUTPUT AND EMPLOYMENT

Aside from redistributing incomes, inflation may affect the total real income and production of the community.

An increase in prices is usually associated with high employment. In mild inflation the wheels of industry are initially well lubricated, and output is near capacity. Private investment is brisk, jobs are plentiful. Such has been the historical pattern.

Thus, many businessmen and union spokesmen, in appraising a little deflation and a little inflation, speak of the latter as the lesser of the two evils. The losses to fixed-income groups are usually less than the gains to the rest of the community. Even workers with relatively fixed wages are often better off because of improved employment opportunities and greater take-home pay; a rise in interest rates on new securities may partly make up any losses to creditors; and increases in social security benefits make up losses to the retired.

In deflation, on the other hand, the growing unemployment of labor and capital causes the community's total well-being to be less; so, in a sense, the gainers get less than the losers lose. As a matter of fact, in deep depression, almost everyone—including the creditor who is left with uncollectible debts—suffers.

The above remarks show why an increase in consumption or investment spending is thought a good thing in times of unemployment, even if there is some upward pressure on prices. When the economic system is suffering from acute depression, few criticize private or public spending on the ground that this might be inflationary. Actually, most of the increased spending will then go to increase production and create more jobs and more real income.

But the same reasoning shows that once full employment and full plant capacity have been reached, any further increases in spending are likely to be completely wasted in price-tag increases. (Recall Chapter 13's discussion of "inflationary gaps.")

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while the GALLOPING INFLATION

low price increases are one thing. But when each increase in prices becomes the signal for an increase in wages and costs, which again sends prices up still further, the result may be in the midst of a malignant, galloping hyperinflation. Nothing good can be said for a rapid rise of prices such as took place in Germany in 1920-1923 and more recently in China and Hungary. Production and even the social order are then disorganized. The total wealth of large groups of the population is wiped out as money becomes worthless. Debtors ruthlessly pursue creditors in order to pay off their obligations in valueless money. Speculators profiteer. Housewives rush to spend their husbands' paychecks before prices rise still further, but in doing so they only bid prices up even faster. As a Southerner said during the Confederate inflation:

When we used to go to the stores with money in our pockets and come back with food in our baskets. Now we go with money in baskets and return with food in our pockets. Everything is scarce except money! Prices are chaotic and production disorganized. A meal that used to cost the same amount as an opera ticket now costs twenty times as much. Business is often at a standstill because no one knows how much to charge. (We'll settle after the war, some say.) As a result, everybody tends to hoard "things" and to try to get rid of the "bad" paper money, which drives the "good" metal money out of circulation. A partial return to barter inconvenience is the result.

Aside from hyperinflations of the German 1920-1923 type, we do see in countries like Chile and Brazil a state of chronic inflation—say, at the rate of 20 to 50 per cent per year—that goes on decade after decade. Somehow the people learn to live on such a merry-go-round. They hoard goods, buy houses never, never lend money at ordinary interest rates; etc. Sometimes, as in Brazil, the economy manages to show real growth; too often, as in Argentina and Chile, growth suffers. Fortunately, there are few cases of German-type hyperinflation except during war or in the backwash of war and revolution. The primary fear today for a mixed economy like America's is of a steady upward *creep* in prices. Will such a creep inevitably become a trot? A trot become a canter? A canter become a gallop? Few economic experts regard such a development as inevitable or even likely. But they still have reason to be concerned with too fast and steady a creep of prices—as we'll soon see.

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CHARACTERISTICS OF LONG-TERM PRICE BEHAVIOR

Ideally, we all want a progressive, full-employment economy in which the excesses of the business cycle are moderated. We want to control the "mad dance of the dollar" as the business cycle passes from boom to crisis and slump. But as far as the long-run trend of prices is concerned, there are three possible programs that different economists sponsor as the soundest modern compromise:

1. *Prices—on the average—are to be stable.* As output increases over time because of population increase, capital formation, and technological progress, the total of dollar capacity rises. Money wages and real wages also rise as a result of the increase in productivity over time.

2. *Prices are to be gently rising.* As high-employment output increases with pro-

Union

employed a wholesale-price index as a deflator. In his subsequent work on the Civil War, Mitchell computed a consumers' price index for this same period with an independent set of data.⁷ These data (reproduced as part of Table 2)⁸ also reveal a substantial fall in real wages, although neither as large a fall as observed when the wholesale price index is used nor as sharp a recovery in 1865. They buttress Mitchell's conclusion that real wages fell during the Civil War. Incidentally, this later study seems to have shaken Mitchell's earlier confidence in the alertness of American workmen to their interests; and he observes in this later work:

In the '60's and, though in somewhat less degree, in the '70's, the labor market of the United States was one in which individual bargaining prevailed. Now the individual laborer is a poor bargainer. He is ignorant of the possibilities of his situation, exposed to the competition of others with the same disabilities, more anxious to sell than the employer to buy. Moreover, custom in the form of rooted ideas about what is a "fair wage" has a peculiarly tenacious hold upon the minds of both parties in the labor market, weakening the wage-earner's aggression and strengthening the employer's resistance.⁹

TABLE 2
CONSUMER'S PRICES, MONEY WAGES, AND REAL WAGES

Year	Prices	Wages	Real Wages
1860	100	100	100
1861	104	99	95
1862	117	104	89
1863	140	119	85
1864	170	142	83
1865	179	155	87

Mitchell readily accepted the hypothesis that inflation accounted for the observed fall in real wages, with substantially no consideration of conditions other than monetary despite his protestation to the contrary.¹⁰ Because of his failure to consider conditions other than monetary (i.e., "real forces"), Mitchell accepted an explanation of his observations that is inconsistent with the way economists explain changes in price ratios in markets other than labor. He rejected a standard explanation with a wide range of applicability in favor of an *ad hoc* explanation, without first showing the inapplicability of the standard explanation. It is the thesis of this paper that, if Mitchell had considered non-monetary conditions more extensively, he would not have regarded his observations as unequivocally supporting the hypothesis that the observed fall was attributable to inflation. Indeed, there are grounds for inferring that the inflation resulting from the issuance of greenbacks led to a higher level of

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TABLE I.

Average Quarterly Prices in Gold of United States Bonds (6 %), and of Confederate States Bonds (8 %), United States Treasury Notes and Confederate States Treasury Notes (100 = par).

	1861.				1862.				1863.				1864.				1865.
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
United States { Bonds	92.9	86.7	88.9	93.0	91.1	97.4	86.1	76.5	63.7	84.8	80.5	73.3	67.9	60.5	44.3	49.3	55.1
United States { Treasury Notes	. . .	. . .	. . .	. . .	99.8	96.3	85.9	77.4	64.4	67.2	75.9	67.1	62.6	53.1	41.5	44.7	50.3
Confederate { Bonds	. . .	. . .	. . .	81.9	91.0	64.9	64.8	39.3	32.1	20.5	17.1	10.8	7.3	5.7	. . .	4.6	2.2
Confederate { Treasury Notes	. . .	. . .	90.0	87.5	82.7	66.7	60.9	39.5	29.0	18.0	9.1	6.3	4.6	5.3	4.6	3.2	1.7

TABLE II.

Currency Prices in the United States, 1861-65. Quarterly Averages, 1860 = 100.

	1861.				1862.				1863.				1864.				1865.
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
Coffee	88	92	92	121	137	157	161	172	214	238	223	234	259	298	329	280	332
Sugar and molasses	84	77	69	115	109	104	126	129	132	130	142	165	173	221	286	228	273
Meat products	88	89	81	82	85	83	84	78	106	110	95	104	126	160	183	197	207
Cereals	89	86	75	79	86	85	106	101	117	140	120	137	169	196	214	199	213
Tobacco	83	83	91	81	110	120	120	169	188	180	223	192	171	228	228	224	271
Cotton	115	117	137	198	345	255	256	519	621	641	635	778	744	700	1117	1135	1104
\$1 gold	100	100	100	100	103	164	116	129	155	149	132	149	160	189	240	224	142

TABLE III.

Index Numbers of Northern and Southern Prices, 1861-65. Quarterly in Gold, 1860 = 100.

	1861.				1862.				1863.				1864.				1865.
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
South { Simple average	110	111	125	149	184	213	300	295	303	231	147	154	199	358	254	221	140
South { Weighted average ¹	108	116	135	161	138	223	290	298	325	261	160	172	220	335	281	225	165
North { Simple average	91	91	91	113	142	129	128	151	147	169	355	182	171	157	184	167	201
North { Weighted average ¹	87	87	79	91	93	93	78	81	82	93	96	95	100	100	94	93	118

¹ Weighted average: coffee, 5; sugar and molasses, 7; meats, 20; cereals, 10; tobacco, 1.

of a gold dollar in Federal "greenbacks" fell from its highest point, in November, \$2.69, to the lowest point, in March, \$1.48.

We now turn from the rise and fluctuations in the price of gold to those of the price of commodities in general. The monthly index number representing the varying price of a number of commodities of wide consumption is given in Appendix I. The particular twenty-two commodities were chosen, because their prices were most regularly and consistently quoted in the available market reports of the time, indicating that those commodities were among those most regularly dealt in, and hence that the variations in their prices fairly reflect the operations of economic laws. The price of lard and flour can be most frequently obtained, as they were very generally handled on the Southern markets; on the other hand, trustworthy quotations of the price of tobacco and cotton are much rarer, as transactions in which these products figured were correspondingly rare.

CONFEDERACY

to form the price index for each city. The general price index for the entire eastern part of the Confederacy was prepared by averaging thirty-seven different commodity price series taken from all four cities.¹⁴ This index is presented in Figure 1 and Table 2.

IV

For 51 consecutive months, from October, 1861, to March, 1864, the general price index of the Confederacy rose at an almost constant rate of 12 per cent a month. As the real value of money fell, Confederate notes were no longer used as a store of value. Debtors refused to extend credit unless they were repaid in gold, cotton or some other commodity. When debtors tried to use the inflated currency to pay off obligations incurred before the war, creditors refused to accept payment. J. D. Davidson, an attorney in Lexington, Virginia, received numerous letters like the following: "Some time about the 1st of the present month, Mr. Jack Jordan came here to me when I refused to take the money [for his debt] owing on the condition of the currency."¹⁵ Davidson's clients wanted to wait until the war was over and the price level lower before they accepted payment.

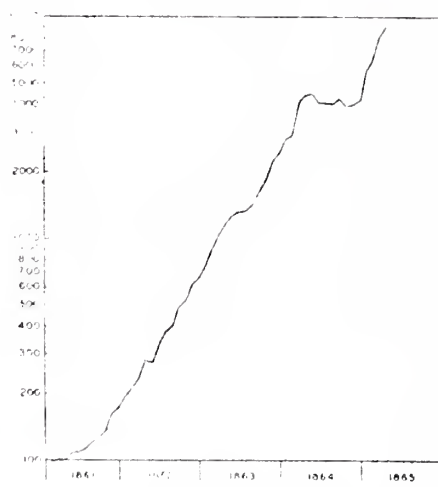


FIG. 1.—The general price index of the Confederacy (first four months of 1861 = 100.)

As early as 1862 some firms stopped selling their produce for currency alone. Customers had to offer some commodity along with their Confederate notes to complete the purchase, a practice that became widespread during 1863. The Gregg Cotton Mills received numerous letters from other manufacturers requesting the exchange of products. One person wrote: "Money will buy little or nothing

here and unless I can find some means of getting food for my wife and men, I fear I shall lose them."¹⁶

As the war went on, money continued to fall in value. By April 1865, the general price index had risen to 92 times its prewar base.

Changes in velocity, in the stock of money, and in the supply of goods determined price changes. Contrary to popular opinion, commodity price movements were not directly affected by military events.¹⁵ On February 17, 1864, the Confederate Congress enacted a currency reform. All existing notes except small notes were to be exchanged for new currency at the ratio of three for two by April 1, 1864.¹⁶ In anticipation of the reform, southerners began to spend

TABLE II
GENERAL PRICE INDEX OF THE EASTERN SECTION
OF THE CONFEDERACY

(First Four Months of 1861 = 100)

Month	Year				
	1861	1862	1863	1864	1865
January	101	193	762	2,801	5,824
February	99	211	900	2,947	6,427
March	101	235	1,051	4,128	8,336
April	101	281	1,178	4,470	9,211
May	109	278	1,279	4,575	
June	109	331	1,308	4,198	
July	111	380	1,326	4,094	
August	120	419	1,428	4,097	
September	128	493	1,617	4,279	
October	136	526	1,879	4,001	
November	161	624	2,236	4,029	
December	172	686	2,464	4,285	

their old notes more rapidly. Prices rose immediately; the general price index rose 23 per cent from February to March, 1864. In May, 1864, the currency reform began to take hold. The general price index dropped dramatically and stayed low through December. This decline took place despite the invading Union armies, the reduction in foreign trade, the impending military defeat, and the low morale of the army. The currency reform was more significant than these powerful forces.

V

To compare the price rise of each city with the average price rise in the entire eastern section of the Confederacy, the index for

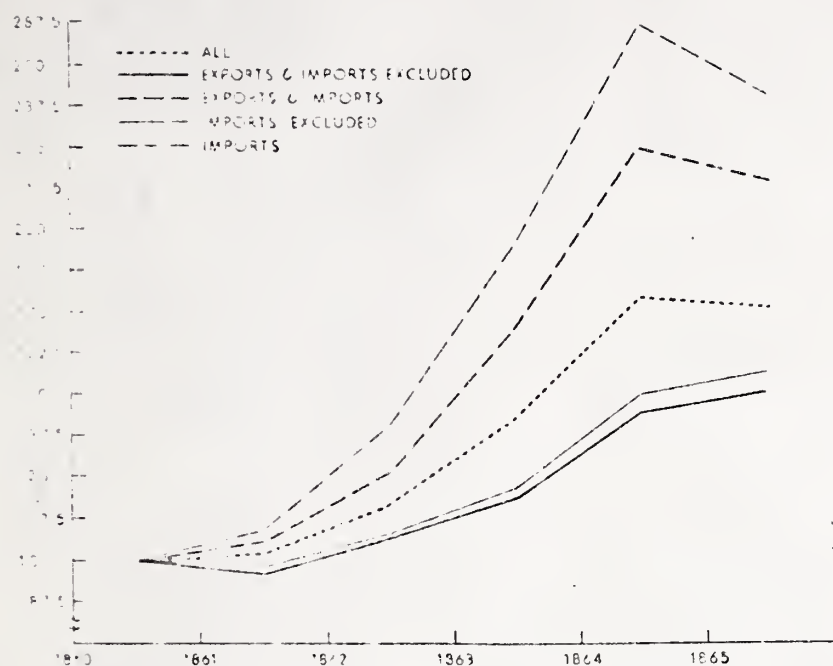


FIG. 1 — Consumer's consumer price index decomposed into imports, imports plus exports, all except imports, and all except imports and exports.

The change in the relative prices of internationally traded goods may be seen more clearly by examining the relative movements of the import and domestic goods components of Mitchell's wholesale price index (see Figs. 2 and 3). Imports at wholesale are "purer" international goods than the same commodities at retail because of differences in domestic marketing costs. Consequently, these relative price movements are more pronounced if wholesale rather than retail prices are observed. If Mitchell's wholesale price index is divided into four categories — exports, imports, domestic goods, and unclassified goods — it is very clear that the prices of internationally traded goods rose relative to domestic goods when the gap between the purchasing-power-parity exchange rate and the actual exchange rate was widening. Conversely, when the gap between the two exchange rates narrowed, the spread between domestic and import prices narrowed.

Mitchell's observations, however, are far from fully explained. In 1865 real wages were lower than they were in 1860, although, with the given premium on gold, purchasing-power-parity theory implies that they should have been roughly identical. Similarly, the prices of imports should have been lower in 1865 in order to reflect

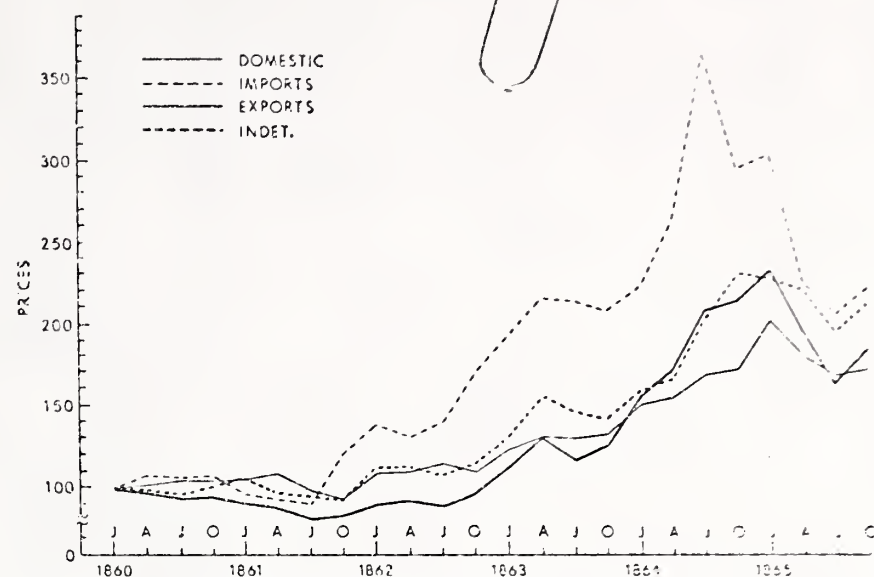


FIG. 2.—Components of Mitchell's wholesale price index; mean values of prices of imports, exports, and domestic and indeterminate goods.

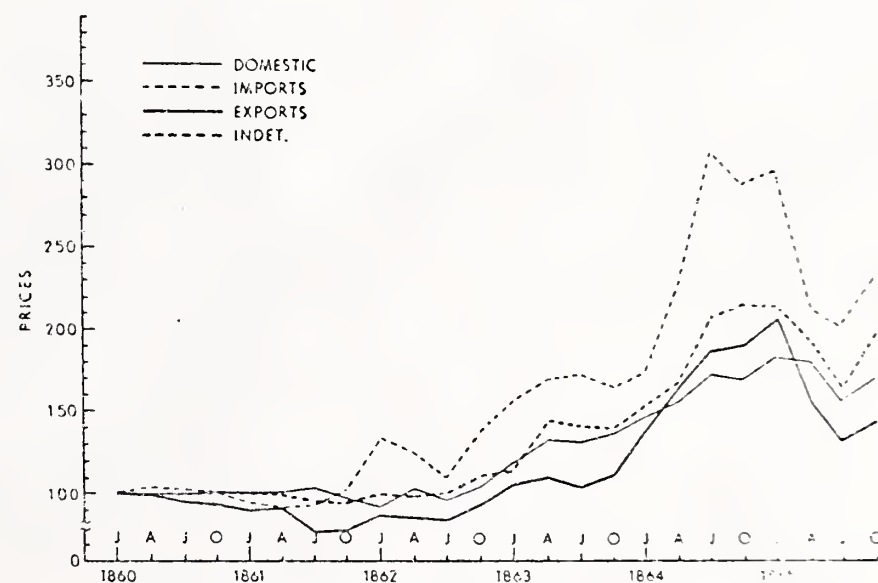


FIG. 3.—Components of Mitchell's wholesale price index; median values of prices of imports, exports, and domestic and indeterminate goods.

Currency Prices In Confederate States, 1861-65

	(1860 = 1.00)									
	<u>1861</u>		<u>1862</u>		<u>1863</u>		<u>1864</u>		<u>1865</u>	
	Mar.	Dec.	Mar.	Dec.	Mar.	Dec.	Mar.	Dec.	February	
Coffee	1.2	4.0	4.5	23	25	79	142	118	196	
Salt	--	---	9.2	42	27	55	77	129	114	
Nails	1.4	1.9	3.8	13	25	44	75	75	91	
Candles	1.0	.9	2.0	4.2	13	26	38	44	126	
Sugar and Molasses	1.3	1.4	2.4	8.5	18	42	95	121	130	
Meat Products (1)	1.1	2.1	2.3	4.7	11	23	50	54	72	
Cereals, etc. (2)	1.0	1.5	1.7	3.2	6.7	12	23	23	46	
Tobacco	1.4	1.5	1.6	4.1	3.5	6.1	4.7	---	20	
Cotton	1.0	1.0	.8	1.5	2.2	6.3	16	17	40	

(1) Bacon, lard, butter (simple average)

(2) Wheat, flour, corn, meal, oats, rice, Irish
potatoes, sweet potatoes (simple average)

Source: Schwab, Appendix I

(10)

CONFEDERACY

THE WAR CLERK'S DIARY

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ever. The *Tribune* (New York)
operation. It says the only way
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British Parliament will recognize
the last day of January.

's *Dispatch*:

eculation.—The state of affairs
al extortion practiced upon the

WINTER OF DISCONFINEMENT

public cannot be better illustrated than by the following grocery bill
for one week for a small family, in which the prices before the war
and those of the present are compared:

1860		1863	
Bacon, 10 lbs. at 12½c.	\$1 25	Bacon, 10 lbs. at \$1	\$10 00
Flour, 30 lbs. at 5c.	1 50	Flour, 30 lbs. at 12½c.	3 75
Sugar, 5 lbs. at 8c.	10	Sugar, 5 lbs. at \$1 15	5 75
Collee, 4 lbs. at 12½c.	50	Collee, 1 lb. at \$5	20 00
Tea (green), ½ lb. at \$1	50	Tea (green), ½ lb. at \$16	8 00
Lard, 4 lbs. at 12½c.	50	Lard, 4 lbs. at \$1	4 00
Butter, 3 lbs. at 25c.	75	Butter, 3 lbs. at \$1 75	5 25
Meal, 1 pk. at 25c.	25	Meal, 1 pk. at \$1	1 00
Candles, 2 lbs. at 15c.	30	Candles, 2 lbs. at \$1 25	2 50
Soap, 5 lbs. at 10c.	50	Soap, 5 lbs. at \$1 10	5 50
Pepper and salt (about)	10	Pepper and salt (about)	2 50
Total	\$6 55	Total	\$68 25

"So much we owe the speculators, who have stayed at home to prey
upon the necessities of their fellow-citizens."

Cotton sells at *seventy-five cents* per pound in the United States. So
the blockade must be felt by the enemy as well as ourselves. War is
a two-edged sword.

JANUARY 31st.—We have dispatches from Charleston, to-day, which
reconcile us to the loss of the cargo captured by the blockading squad-
ron early in the week. An artillery company captured a fine gun-boat
in Stone River (near Charleston) yesterday evening. She had eleven
guns and 200 men.

But this morning we did better still. Our little fleet of two iron-clads
steamed out of Charleston harbor, and boldly attacked the blockading
fleet. We crippled two of their ships, and sunk one, completely raising
the blockade, for the time being. This will frustrate some of their
plans, and may relieve Wilmington.

The attack on Fort McAlister was a failure.

Major Lear, of Texas, who was at the capture of the *Harriet Lane*,
met on the captured steamer his mortally-wounded son, the lieutenant.

A few days ago, Lieut. Buchanan was killed on a United States
gun-boat by our sharpshooters. He was the son of Admiral Buchanan,
in the Confederate service, now at Mobile. Thus we are reminded of
the wars of the roses—father against son, and brother against brother.

FEBRUARY 1st.—The Virginia Legislature, now in session, has a bill
under discussion for the suppression of extortion. One of the members,
Mr. Anderson, read the following table of the prices of

Commodity

AGRICULTURAL PRODUCE

Before the war		Now (1863)	
White wheat, per bushel	\$1 50	White wheat, per bushel	\$1 50
Flour, per barrel	7 50	Flour, per barrel	22 00
Corn, per bushel	70	Corn, per bushel	3 50
Hay, per hundred	1 00	Hay, per hundred	3 50
Hides, per pound	7	Hides, per pound	40
Beef, per pound	8	Beef, per pound	50
Bacon, per pound	13	Bacon, per pound	60
Lard, per pound	15	Lard, per pound	1 00
Butter, per pound	30	Butter, per pound	1 50
Irish potatoes	1 00	Irish potatoes	5 00
Sweet potatoes	1 00	Sweet potatoes	6 00
Apple brandy	1 00	Apple brandy	15 00
Wool, per pound	30	Wool, per pound	2 00

MANUFACTURES

Bar iron, per pound	4	Bar iron, per pound	20
Nails, per pound	4	Nails, per pound	60
Leather, sole, per pound	25	Leather, sole, per pound	2 50
“ upper, per pound	33	“ upper, per pound	3 50

COTTON GOODS

Osnaburgs, per yard	10	Osnaburgs, per yard	75
Brown cotton, per yard	10	Brown cotton, per yard	75
Sheeting, per yard	15	Sheeting, per yard	1 25

WOOLEN GOODS

Coarse jeans	45	Coarse jeans	4 00
Crenshaw's gray	2 00	Crenshaw's gray	28 00

MISCELLANEOUS

Coarse shoes	\$1 50	Coarse shoes	\$15 00
High-quartered shoes	3 50	High-quartered shoes	25 00
Boots	7 50	Boots	60 00
Wool hats, per dozen	7 00	Wool hats, per dozen	50 00

STOCKS

Dividends on stocks in cotton companies, worth in May, 1861, \$25 to \$50 per share, now from \$112 to \$110.

It is doubtful whether the bill will pass, as most of the members are agriculturists.

It is said and believed that several citizens from Illinois and Indiana, now in this city, have been sent hither by influential parties, to consult our government on the best means of terminating the war; or, that failing, to propose some mode of adjustment between the North-

western States and the Confederacy, and now of Yankee States and the Federal administration.

Bornside has at last been removed; and, [W.] [Edwin V.] Sumner have resigned. Gen. Hooker, Federal Army of the Potomac—if it may be still R—, who knows Hooker well, says he is delicate; and many years ago gentlemen refused. He resigned from the army, in California, and Yankee like, on speculation—and failed.

FEBRUARY 2d.—After the feat at Charleston Commodore [Duncan N.] Ingraham invited to inspect the harbor, and they pronounced the United States ship being seen off the coast. The commodore issued a proclamation to the world open. If this be recognized, then the United States sixty days' notice before the port can be closed and by that time we can get supplies enough. Before night, however, some twenty blockade bar. It is not a question of right, or of might land—but of inclination. Whenever they, or we disposed to relieve us, it can be done.

The enemy's gun-boats returned to the border Alister, and met no success.

Senator Saulsbury, of Delaware, has been at Arms of the Senate, for his denunciation of "cile."

FEBRUARY 3d.—It appears that Gen. [Roger] strong, was attacked by the enemy, said to be Blackwater. After some shelling and infantry some eight miles, and was not pursued. Our said the enemy had 500 killed and wounded; 1 was ascertained.

Gold in the North now brings 58½ cents per at \$1.75. Cotton at 96 cents per pound!

To-day, when conversing with Judge Perkins a passport system established by law, he had despaired of its accomplishment. "For," said he in Congress which has not the sanction of the I thought, from his manner and tone, that the government was omnipotent, having swallow

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TABLE IV
WAGE INDEX FOR THE CONFEDERACY
(January, 1861 = 100)

Month	Year				
	1861	1862	1863	1864	1865
January	100	121	201	397	784
February	100	112	207	381	884
March	99	118	212	462	987
April	101	119	237	402	
May	107	122	233	398	
June	105	127	241	372	
July	100	122	263	385	
August	100	136	296	394	
September	106	139	305	450	
October	101	160	341	527	
November	116	166	371	528	
December	114	177	349	521	

The most serious objection to deflating money wages by a wholesale price index of farm products and textiles is that it overstates the decline in the value of a worker's money wage by between 20 and 40 per cent.¹⁴ The price index used to deflate money wages, plotted in Figure 6, reveals that wholesale domestic prices rose approximately

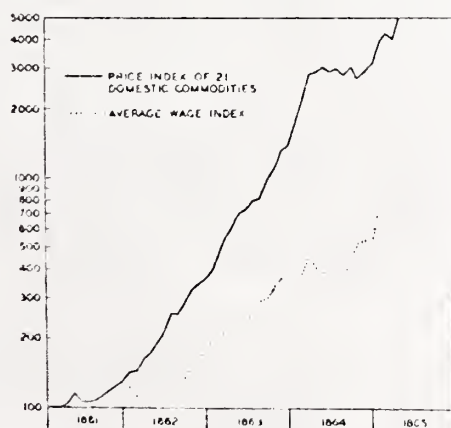


FIG. 6—Index of prices of twenty-one domestic commodities compared with index of wages. (January, 1861 = 100.)

40 times by March, 1865, or at a rate of 9 per cent a month. If this index overstates the rise in the cost of living price index by, say, 50 per cent, the cost of living rose approximately 30 times in the Confederacy. Since money wages rose only ten times during the war, real wages declined to approximately one third their prewar level.

In addition to money wages, workers received part of their wages in kind,¹⁵ and this portion was not reduced by the rise in prices. In February, 1865, the Henry Garst Sawmill paid its help \$90 and a barrel of flour for a month's labor.¹⁶ Undoubtedly, some workers increased their take-home pay, but not their rate of real hourly wages, by working longer hours. Others worked night shifts and received about one-and-a-half times the day rate; still others must have supplemented their family incomes by growing food on their own small plots of land or having other members of their family take jobs also.

These various ameliorations were probably not very large. If they were equivalent to a 10 per cent increase in money wages, real wages in the Confederacy had declined to well under 40 per cent of their prewar level by March, 1865. Southern labor complained bitterly that its wages were "totally inadequate to afford in the most necessities of life — plain food, shelter, fuel, and clothing. We are literally reduced to destitution."¹⁷

Physical productivity probably declined during the war. More people were employed in a fixed plant. For example, 20 people were employed by the Fries Mills in 1861 and 48 in December, 1864. Production was constantly interrupted by Confederate seizures of impressed raw materials. The Fries Mill spun raw wool through the Union lines to make Confederate uniforms. When agents seized this wool because the import duty had not been paid, the mill was unable to replace it. The mill did not fulfil its government contract and temporarily halted production.¹⁸ The conscription law also prevented steady and continuous production. The manager of a shoe factory in Montgomery, Alabama, reported:

It takes fully one half the time of my clerks and laborers much of my own to attend to the detaining men. I must have a man trained and somewhat efficient that he is ordered to report to camp, and then, after considerable delay, have his services replaced by a new one and in the end, in most cases, who is one half the time in the hospital and the other half not able to do much work.¹⁹

Machinery worn out through normal use was difficult to replace, and occasionally entire factories were destroyed by fire or northern troops. This happened, for example, to some of the furnaces of the Tredegar Mills. These events probably more than offset any increase in productivity caused by patriotically increased endeavor. They reduced the marginal physical product and offset in part the increases

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CONFEDERACY

SOUTHERN PRICES

167

USA

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ay 1, 18. 22, 23, 1861;
; Apl. 27, 1861.

*John Christopher
Schwab,
the Confed. States of America
1861-1865, the South
Civil War*

a decided decline till the middle of 1864, when the last upward start was made, the figures reaching 61 : 1 in March, 1865, and 1000 : 1 at the end of the following month. This movement of the gold premium corresponds roughly with the amount of government notes outstanding in each period. The relatively rapid increase in the issue of notes after August, 1862, during the last months of 1863, and again during the last months of the war, is reflected in the rapid increase of the gold premium at those three times. When the amount of outstanding notes remained stationary at the beginning of 1863, there was a somewhat slower advance of the gold premium during those months; while the shrinking of the outstanding notes during the first half of 1864 is distinctly reflected in a temporary decline of the premium.

AVERAGE MONTHLY VALUE IN CURRENCY OF ONE GOLD DOLLAR.

1861.	1862.	1863.	1864.	1865.
Jan.	Jan. 1.2	Jan. 3.	Jan. 21.	Jan. 53.
Feb. 1.	Feb. 1.2	Feb. 3.3	Feb. 23.	Feb. 53.
Mch. 1.	Mch. 1.3	Mch. 4.1	Mch. 22.	Mch. 61.
Apl. 1.	Apl. 1.5	Apl. 4.5	Apl. 21.	
May 1.	May 1.5	May 5.2	May 19.	
June 1.	June 1.5	June 7.	June 17.	
July 1.1	July 1.5	July 9.	July 20.	
Aug. 1.1	Aug. 1.5	Aug. 12.	Aug. 22.	
Sept. 1.1	Sept. 2.	Sept. 12.	Sept. 23.	
Oct. 1.1	Oct. 2.	Oct. 13.	Oct. 26.	
Nov. 1.2	Nov. 2.9	Nov. 15.	Nov. 30.	
Dec. 1.2	Dec. 2.9	Dec. 20.	Dec. 38.	

The table is based especially on the market reports in the Richmond, Charleston, and New Orleans papers; it differs slightly from similar tables previously published. Cf. N. C. act Mch. 12, 1866 (acts 1866, ch. 39), which fixed a scale of depreciation of Confederate currency; 34 Ga. 487 (1866); Appleton, *Ann. Cyclopaedia for 1865*, p. 188; N. Y. *Eve. Post* (corresp.), Aug. 4, 1896.

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The prices of commodities varied greatly in different parts of the South during the war. Aside from the differences due to a scarcity of the given article in one and an abundance of it in another market, the city markets, such as those of Richmond, Charleston, and New Orleans, gave different results from those in rural sections, such as of North Carolina. Food articles were, as a rule, higher in price in the cities than in the country; while the opposite was true of imported articles, such as silk and coffee, especially toward the end of the war. In spite of these differences in prices, the figures in the appendix represent the typical monthly price of each of the twenty-two articles in the South, as compared with the 1860 level. In obtaining these figures little reliance was put upon the official schedules of prices, published by commissions in various States and sections, according to which imported goods were to be sold to the government. These were invariably below the actual level of the prevailing market prices, and are chiefly useful in pointing out the local differences in prices in any one month.

For convenience, the monthly index number may be reduced to a quarterly average, and most of the commodities may be combined into groups. These have been reduced to old prices, on page 173, and brought into comparison with the similar figures for the North.

A study of these figures shows that the currency price of commodities rose with the rise in the price of gold, but generally much higher. Moreover, each unusual rise in the gold premium in the South was not coincident with, but was followed by, a general rise in the prices of commodities. Thus, the effect of the rapid rise of the premium in the spring of 1862, the summer of 1863, the first months of 1864, and the first months of 1865, noted and explained above, was exerted upon the price level of commodities some time later. In the North the currency prices of commodities responded more quickly to a sudden rise in the gold premium. Periods of high prices were in general coincident with, and did not

¹ Cf. p. 172.

COMPARISON:
UNION AND CONFEDERACY

GOLD PRICES IN THE NORTH AND IN THE SOUTH, 1861-65.
Quarterly Averages, 1860 = 100.

SOUTHERN PRICES

	1861				1862				1863				1864				1865
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
Coffee	{ N. 83	92	92	121	134	151	138	133	138	160	169	157	162	158	137	125	167
	{ S. 115	141	210	326	379	367	733	836	805	537	293	462	482	725	545	377	272
Sugar and Molasses ¹ }	{ N. 84	77	69	115	106	100	88	100	85	87	108	111	108	117	119	102	137
	{ S. 130	123	89	93	159	303	274	313	389	357	310	233	366	566	491	359	224
Bacon, Lard, Butter, and Hides ¹ }	{ N. 88	89	81	82	83	80	60	60	68	74	72	70	79	85	76	88	104
	{ S. 106	116	149	172	183	204	273	246	270	229	119	128	156	234	210	182	159
Wheat, Flour, Corn, Meal, and Oats ¹ }	{ N. 89	86	75	79	84	82	73	78	77	94	91	92	106	88	89	86	107
	{ S. 103	103	101	109	122	129	153	140	168	139	84	82	104	180	163	141	94
Tobacco	{ N. 83	83	91	81	107	116	103	131	121	151	169	129	107	121	95	100	136
	{ S. 107	79	..	122	..	..	..	143	126	69	42	35	31	..	53	..	34
Cotton	{ N. 115	117	137	198	336	246	306	402	400	451	482	522	466	371	590	498	555
	{ S. 98	104	77	70	76	56	94	89	63	53	35	42	58	84	61	46	55

¹ Simple average.

The Equation of Exchange:

$$MV \equiv PQ$$

Where:

M = quantity or stock of money
(coin, currency, bank deposits)

V = velocity of circulation of M
(how fast people get rid of M)

P = price level
(Index of average prices)

Q = real national product
(Goods and Services)

/This equation is an identity. Identification of the four elements is useful in analyzing the causes of inflation./

CIVIL WAR LOANS OF THE UNITED STATES GOVERNMENT¹

<i>Date of the act</i>	<i>Nature of the loan, term, and rate of interest</i>	<i>Amount issued (or authorized; see n. 2 below)</i>	<i>Amount outstanding June 30, 1865</i>
Acts of July 17, 1861, and Aug. 5, 1861	Bonds redeemable after 20 years. Interest, 6%	\$ 50,000,000	\$ 50,000,000
	Treasury notes, 3 years. Interest, 7.30%	139,999,750	139,155,630
	Demand notes without interest	60,000,000	472,000
Act of Aug. 5, 1861	Twenty-year bonds. Interest, 6%. Exchangeable for 7.30% treasury notes		431,300
Act of Feb. 25, 1862	"Five-twenties"—i.e., bonds redeemable after 5 years and payable 20 years from date. Interest, 6%	514,780,500	514,780,500
* Acts of Feb. 25, 1862, July 11, 1862, Jan. 17, 1863, and Mar. 3, 1863	U. S. notes—i.e., paper money ("greenbacks") irredeemable and non-interest-bearing	450,000,000 ²	432,687,000
Acts of Feb. 25, 1862, Mar. 17, 1862, July 11, 1862, June 30, 1864	Short, temporary loans, not less than 30 days. Interest, 4, 5, and 6%	150,000,000 ²	89,717,000
Acts of Mar. 3, 1863, and June 30, 1864	"Ten-forty" bonds, running not less than 10 nor more than 40 years, issued at premium of 4.13%. Interest, 6%	75,000,000	75,000,000
Act of Mar. 3, 1863	Interest-bearing treasury notes, payable in one or two years. Interest, 5%	211,000,000	42,328,710
Act of Mar. 3, 1863	Same, payable in 3 years. Interest, 6%	17,250,000	15,000,000

¹ Condensed and rearranged from Report of the Secretary of the Treasury, 1865, *H. Exec. Doc. No. 3*, 39 Cong., 1 sess., pp. 50 ff.

² These were the amounts authorized, the amounts issued not being given in this report.

W. C. Mitchell, national credit declined; government securities could not be sold through the banks; depositors withdrew their funds; and specie became alarmingly scarce. "It was all outgo now, and no income. The end was but a question of time. After standing the strain upon their reserves

CIVIL WAR LOANS OF THE UNITED STATES GOVERNMENT (Continued)

GOVERNMENT

Amount authorized, June 30, 1865

30,000,000	\$ 50,000,000
150,000,000	130,000,000
50,000,000	47,000,000
	431,300
514,780,500	514,780,500
450,000,000	432,687,000
150,000,000	89,717,000
75,000,000	75,000,000
211,000,000	42,358,700
17,550,000	15,000,000

Secretary of the Treasury, 1865

issued not being given in this

government securities could
draw their funds; and spend
now, and no income. The
the strain upon their

Date of the act	Nature of the loan, term, and rate of interest	Amount issued	Amount outstanding June 30, 1865
Act of Mar. 3, 1864	"Ten-forties." Interest, 5%	\$172,770,100	\$ 172,770,100.00
Acts of Mar. 1, 1862, and Mar. 3, 1863	One-year certificates of indebtedness. Interest, 6%		115,772,000.00
Acts of July 17, 1862, and Mar. 3, 1863	Postal currency	20,192,456	9,915,408.66
same laws as for preceding item	Notes of fractional parts of one dollar	[Not specified]	15,090,420.10
Act of June 30, 1864	"Five-twenties"—bonds running not less than 5 nor more than 20 years. Interest, 6%	91,789,000	91,789,000.00
Act of June 30, 1864	Interest-bearing treasury notes, payable in 3 years. 6% compound interest	178,756,000	178,756,000.00
Act of June 30, 1864	Interest-bearing treasury notes, payable in 3 years. Interest, 7.30%	234,400,000	234,400,000.00
Acts of July 1, 1862, and July 2, 1864	Thirty-year bonds to Central Pacific R. R. Co. Interest, 6%	1,258,000	1,258,000.00
Act of Mar. 3, 1865	Three-year treasury notes. Interest, 7.30%	437,210,400	437,210,400.00

Total indebtedness of the U. S., June 30, 1865

This total includes the items shown in the table, and in addition various items of debt outstanding in 1861.

For two weeks, the New York banks were compelled . . . to suspend
their payments on the thirtieth day of December [1861]. Banks in other
places speedily followed suit. The suspension of the national Treasury was
regarded as a necessary consequence of the suspension of the banks. Thus
the first day of the new year 1862 saw the collapse of the whole scheme of
national finance."

White, Money and Banking (5th ed.), 109, citing Wesley C. Mitchell in
Rev. of Pol. Econ., VII, 289-326 (June, 1899).

The Union

III THE TAX SYSTEM USED TO FINANCE THE CIVIL WAR

Three means of war finance, important because of their implications for real wages during the Civil War, are the use of excises, import duties, and the tax on money imposed by inflation. Excises and import duties grew in importance during the war years with extension of coverage and increases in rates. In 1861 the Morrill tariff (under consideration in the House of Representatives before the war) was enacted. This tariff increased the cost of many imports, particularly iron and wool.³⁶ While this tariff was announced as a revenue measure, the heaviest duties were imposed on commodities produced in the United States, and revenue was in part sacrificed for protection.³⁷

In 1862 a comprehensive system of excise taxation was enacted. Specific taxes were imposed on the production of iron, steel, coal oil, paper, leather, and several other goods. A general *ad valorem* tax was imposed on manufacturing output. Import duties were also increased.³⁸ In 1864 all these taxes were once more increased and enlarged in scope.

Every ton of pig iron produced was charged two dollars; every ton of railroad iron three dollars; sugar paid two cents a pound; salt, six cents a hundredweight. The general tax on oil manufactures was five percent. But this tax was repeated on almost every article in different stages of production. Raw cotton, for instance was taxed two cents a pound; as cloth it again paid five cents.³⁹

Wells observed that, under the impact of these turnover taxes, "the government actually levied and collected from eight to fifteen and in some instances as much as twenty per cent on every finished product."⁴⁰ The average rate on dutiable commodities, which had been 37 per cent under the act of 1862, became 47 per cent under that of 1864.⁴¹ Indeed, import duties became so high in 1864 that collections from this source decreased relative to the preceding year as a result of smuggling.⁴² The 5 per cent tax on manufacturing imposed in 1864 was increased to 6 per cent in 1865.⁴³ Needless to say, as a result of the imposition of these taxes, revenues from customs and internal revenue increased enormously over their prewar level (see Table 4).⁴⁴

It is evident that these excises and import duties diverted resources from consumers to the government and raised the price of all goods and services relative to factor incomes. These excises were to a great extent turnover taxes and as such became imbedded in the prices observed by Mitchell in the latter years of the war. As a consequence, taxation operated to widen whatever divergence existed between the value of final output and the sum of the payments to the co-operating agents of production. This means that some of the

fall in real wages Mitchell observed resulted from custom duties, excises and would have taken place whether or not inflation occurred during the Civil War.

TABLE 4
RECEIPTS FROM CUSTOM DUTIES AND INTERNAL REVENUE
(In Millions of Dollars and as a Percentage of All Receipts)

	1861	1862	1863	1864	1865
Customs	\$39.6 (61.4%)	\$49.1 (10.1%)	\$69.1 (9.8%)	\$102.3 (10.9%)	\$ 84.9 (7.1%)
Internal Revenue	0	0	\$37.6 (5.3%)	\$199.7 (11.7%)	\$293.5 (17.5%)

As a result of the extensive use of turnover taxes real wages as measured by Mitchell ought to have fallen, even if the foreign-exchange rate were equal to the rate implied by purchasing-power-parity. Consequently, the level of real wages observed in 1865 ought to be below that of 1860, by an amount greater than the differential attributable to the abnormally high real wages in 1860. This comprehensive system of excise taxation taxed imports much more heavily than it taxed goods produced in the United States, and imports as a class were therefore forced up in price relative to domestically produced goods and services. The fall in real wages attributable to taxation should be concentrated upon internationally traded goods, and this appears to be the case. Or this is why, at the end of the war, the prices of imports were high relative to domestic goods, despite equality between the exchange rate implied by purchasing-power-parity and the actual rate.

The inflation associated with the Civil War in the North was caused by a government-imposed tax on cash balances. Through the exchange of greenbacks for real resources, the government progressively reduced the real value of a unit of currency, and the rising prices that resulted imposed economic losses upon money holders. But if inflation had not occurred, and if real expenditures by the government had not been reduced, then alternative taxes would have had to be employed. If the inflation tax on cash balances were replaced by a tax on income or wealth, then Mitchell's real-wage measurements would be unaffected. On the other hand, if the alternative tax were higher tariffs or turnover taxes, then a greater fall than Mitchell measured is implied.⁴⁵ If turnover taxes or higher tariffs are regarded as the alternatives to taxing through inflation, the Civil War inflation kept the real wages measured by Mitchell from falling more than they in fact did. Therefore, a rationale exists for a conclusion that is the converse of Mitchell's — were it not for the inflation, he would have found that real wages would have fallen more than they did.

of the northern blockade, in Section VIII, I discuss the real value of money, in Sections IX, X, and XI, wage movements; and in Section XII, the popular response to the inflation.

TABLE I
TOTAL STOCK OF MONEY IN THE SOUTH IN MILLIONS OF DOLLARS

Date	Bank Notes and Deposits*	Confederate Government Notes	Total	Index: January, 1861 = 100
1861:				
January	\$ 94.6		\$ 94.6	100
April	121.8		121.8	130
June	119.3	\$ 1.1	120.4	130
October	146.3	24.5	170.8	180
1862:				
January	165.2	74.6	239.8	250
April	151.1	131.0	282.1	300
June	142.9	166.1	309.0	330
October	181.5	287.3	468.8	500
1863:				
January	239.1	410.5	649.6	690
April	257.1	561.7	818.8	870
June	267.5	637.3	904.8	960
October	274.7	792.4	1,067.1	1130
1864:				
January	268.1	826.8	1,094.9	1160

*These figures are not adjusted for interbank deposits and are therefore biased upward.

II

The stock of paper money in the South consisted of Confederate issues, bank notes and deposits, state treasury notes,¹ shinplasters,² and legalized counterfeits. I estimated the amount of Confederate notes outstanding from the periodic reports of Secretaries Memminger and Trenholm; and I used United States Treasury figures, southern bank reports, and unpublished bank records to estimate the amount of bank credit issued.³ State treasury notes, shinplasters, and legalized counterfeits were ignored, because their combined total value was insignificant compared with the amount of Confederate notes and bank credit issued.

My estimates indicate that the stock of money in the South increased approximately elevenfold in the three years from January, 1861, to January, 1864. In the light of the large amount of Confederate notes issued, this increase seems remarkably small. The rise in the stock of money was thus limited because banks sharply increased their reserve ratios as the war continued.

Commercial banks had no central bank to support them during

crises. Southern bankers expected mass withdrawal whenever Union troops approached and they protected themselves the only way they could — by limiting the amount of credit they created. Georgia banks had 47 per cent reserves in June, 1862, and 62 per cent in June, 1863; the Bank of Fayetteville had 21 per cent in May, 1861, and 40 per cent in November, 1863; the Bank of South Carolina had 5 per cent in January, 1861, and 30 per cent in October, 1863; the Bank of the Valley in Virginia had an average of 41.2 per cent in 1861, 56.7 per cent in 1862, 57.2 per cent in 1863, and 65.6 per cent in 1864.⁴

In the North during these war years, \$1.40 was created by the bank per dollar printed by the government.⁵ In the South, as of January, 1864 only \$1.20 had been created by the banks per dollar printed by the government. The stock of money, and therefore prices, would have risen still more had southern bankers not increased their reserve ratios.

III

Abundant price quotations during the Civil War are available for the cities of Richmond, Virginia; Wilmington and Fayetteville, North Carolina; and Augusta, Georgia. In each, the capital of the Confederacy was overlooked and badly frequented, but during the war Wilmington was severed a waterway from the north by boats that ran the blockade, landed and sold their goods, and so became an important supply point for the southern army. And Fayetteville was a small inland community, one of the few cities that had no private railways and had no other cities within a hundred miles apart. Any generalization drawn from such a few cities probably be extended over a somewhat broader area with a small error.

Wholesale prices are preferable to retail prices for studying inflation, because they "generalize" their fall in level and are more uniform and homogeneous than retail prices. The closest approximation, however, of commodities, regularly and systematically collected, is necessary. The wholesale-price quotations used in this study were taken from the local newspapers that reported regularly on market conditions.⁶ These quotations are more readily available and are easier to use than the prices recorded in the business letters or in the account books of firms.

From newspaper quotations five raw-weighted national price indexes were constructed: one for each of the four cities selected and one averaging the commodity prices of all four cities.

Continuous price series were constructed for 25 commodities in Richmond, 23 in Fayetteville, 34 in Augusta, and 25 in Wilmington.⁷ The monthly price relatives of each commodity were calculated, using the commodity's average price during the first four months of 1861 as a base.⁸ These price relatives were then averaged

... others, by this slow, often painful means, the demand for property was gradually reduced, though until September, 1862, not as fast as the supply was falling.

By 1862, the ratio of import prices to export prices had widened further. Winter shifted from growing cotton to growing potatoes, whose prices rose faster.¹⁴ The cotton harvest of the fall of 1861 amounted to about 4,500,000 bales; in the year it dropped to just over 1,500,000; in 1863 it was somewhat higher.¹⁵ The next year fell to about 300,000.¹⁶ On the demand side, demand for raw materials as wool and other materials continued to grow. The demand-supply, and increased demand in the price structure, that of other exports, rise more rapidly.

100

The nominal price index of the Confederacy increased twenty-five percent in the first quarter of 1864 to January 1864. During the same period the stock market increased only elevenfold. The increase in the interest rate is proportional to increases in the velocity of circulation, and hence to the Southern output. Interestingly, the nominal price index went up at a rate faster than the stock market, which is probably the result of the fact that each of these forces is measured, however, in a measure of their combined strength is given by the stock market, with the stock market. The ratio increases if the nominal price index rises and declines if velocity rises, or falls if velocity falls.

As shown in Table 1, changes in the real value of Confederate cash holdings are plotted on a 1961-1964 III. Until June, 1862, the index of real value was greater than 100, the level of January, 1861. Instead of redeeming their cash holdings immediately, southerners held notes longer, suggesting that they were slow to realize that inflation was under way. In October, 1862, when it was clear that more inflation was in store, the index of cash balances fell below the January, 1861, level. After this date, prices rose more than the stock of money increased.¹⁰

This pattern, in which the aggregate real value of cash balances first rises, then falls, has been found in every major inflation for which statistical data are available. Keynes, in describing the inflations of post-World War I in Europe, accounted for this repeated occurrence as follows:

At first there may be a change of habit in the wrong direction, which actually facilitates the Government's operation 'of collecting taxes by issuing notes'. 'The public is so much accustomed to thinking of money as the ultimate standard, that, when prices begin to rise, believing that the rise must be temporary they tend to hoard their money and to postpone

purchases, with the result that they hold in net a larger aggregate of real value than before. . . . But once the second phase sets in. . . . The public discovers that it is the holder of notes that suffer taxation and defers the expenses of government and they begin to change their habits and to economize in their holding of notes.²

TABLE III
THE REAL VALUE OF MONEY

Date	Increase in Stock of Money (Jan., 1861 = 100)	Index of Commodity Prices (Jan., 1861 = 100)	Real Value of the Stock of Money Col. 2 Col. 3 (4)
1861:			
January	100	100	100
April	129	100	129
June	127	108	117
October	180	135	134
1862:			
January	253	191	133
April	298	279	107
June	337	328	102
October	496	522	95
1863:			
January	687	756	90
April	666	1,168	57
June	959	1,295	74
October	1,129	1,858	61
1864:			
January	1,159	2,776	42

On January 10, 1863, Secretary Memminger stated that velocity had fallen to two thirds of its prewar rate.³⁰ If the Secretary's estimate was correct, the real income of the South declined 40 per cent by January, 1863.³¹ If he was correct only in that velocity fell, the decline in the real value of money by January, 1863, would still be attributable to the drop in the South's real output.

During the first two years of the war, the real income of the South fell because the Confederate army drained large numbers of white men from the labor force. General Clement A. Evans estimated that approximately 40 per cent of the white men of military age were in the army.³² Colonel Thomas L. Livermore put the number still higher and thought that "substantially the entire military population of the Confederate States not exempted by law were enrolled in the army."³³ The jobs left vacant could not be filled

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TREASURY NOTES

tion gave Congress the power "to declare war" and "to raise and support armies"; that it also granted to Congress the authority "to make all laws which shall be necessary and proper for carrying into execution the foregoing powers"; thus the constitutional right to declare Treasury notes a legal tender was established.

Discussion over a legal tender currency aroused the leading newspapers to take sides on the issue. Among those advocating a legal tender were the *Richmond Examiner* and the *Charleston Courier*. Those constantly opposed to a legal tender were the *Charleston Mercury* and the *Augusta Constitutionalist*.

During the first three years of the Confederacy, numerous legal tender bills were introduced in Congress, but Secretary Memminger's opinion in regard to their inexpediency and the strict constructionist views held by a majority of the Congressmen prevented any of the bills from becoming law. On December 24, 1863, Senator A. G. Brown of Mississippi in urging passage of a legal tender bill offered all the arguments previously used, but to no avail. With this failure, the question of a legal tender came to an end. Following adoption of the funding act of February 17, 1864, Congress relied upon its plan of compulsory funding and taxing of Treasury notes to correct the evils of a redundant currency; when this failed, all hope of curbing inflation by legislative measures ended.

The following table is a summary of the total amount of Treasury notes issued by the Confederate Government:

TABLE SHOWING AMOUNT OF EACH ISSUE OF CONFEDERATE TREASURY NOTES¹³⁴

Act of March 9, 1861	\$	2,021,100.00
Act of May 16, 1861		17,347,955.00
Act of August 19, 1861		
Total	\$292,101,850.00	
Less notes stolen, destroyed, &c.	140,000.00	291,961,850.00
Act of April 17, 1862		
Total	\$128,561,400.00	
Less 100's destroyed	320,000.00	128,241,400.00

CONFEDERATE FINANCE

TABLE SHOWING AMOUNT OF EACH ISSUE OF CONFEDERATE
TREASURY NOTES—Continued

Act of October 13, 1862		
Total	\$110,103,200.00	
Less one's & two's, never issued	2,400.00	110,100,800.00
Act of March 23, 1863		
Total	\$517,995,278.50	
Less ten's printed but never issued	21,000.00	517,974,278.50
Act of February 17, 1864 . . .		456,142,990.50
Net amount issued . . .		\$1,554,087,351.00

TARIFF

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April 1, 1861, at which time
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in the staff was necessary.
C. C. Walden of Savannah. C

April 1, 1865, or as soon thereafter as possible, each taxpayer being allowed an exemption of \$200. The act also provided that, "if any State of the Confederacy borrows from any bank, coin or bullion, and lends it to the Confederate Government, the bank that lends such coin or bullion shall be allowed a credit against this tax to the extent of such loan."⁹⁷

Under this provision of the act, Secretary Trenholm urged the banks to advance their specie to the Government and succeeded in borrowing a total of \$300,000 from the Richmond Banks and their subsidiaries.⁹⁸ Captain John M. Strother, financial agent of the commissary department, acting under the orders of John C. Breckinridge, Confederate Secretary of War, received the specie on or about March 27, 1865. Prior to his evacuation of Richmond on Sunday night, April 2, 1865, Captain Strother paid \$25,000 of this specie fund to various officers of the commissary department. Almost immediately thereafter the Government collapsed, and the remnants of the Treasury were shipped southward to Danville, Virginia, where some of the money was disbursed for the use of Lee's army. The surrender of General Lee, April 9, 1865, drove the specie train farther South and it finally reached Washington, Georgia. The last days of the Confederate Treasury and what became of its specie has already been told by Micajah H. Clark.⁹⁹

In concluding the discussion of the funded debt of the Confederate States of America, it should be noted that Congress resorted to loans on at least fourteen occasions as a means of raising funds to finance the Government's operations. These loans fell in one of three classes—specie loans, produce loans, or funding loans—depending upon the prime purpose for their authorization.

The following is a summary table of the total funded debt of the Confederacy.

TABLE OF THE FUNDED DEBT OF THE CONFEDERATE STATES OF AMERICA ¹⁰⁰		
<i>Loan</i>	<i>Net Amount Issued</i>	
Alabama Loan of February 8, 1861	\$	500,000
Loan of February 28, 1861		
Coupon Bonds	\$10,882,750	
Exchanged for Stock	\$ 245,900	10,636,850
Stock (total value of certificates issued)	\$ 6,674,200	

STATES OF AMERICA—Continued			
<i>Loan</i>			<i>Net Amount Issued</i>
Certificates erroneously issued	\$ 3,650		
Transfer Certificates	2,317,400	2,321,050	4,353,150
Loan of May 16, 1861			
Coupon Bonds			958,500
Stock	\$12,235,600		
Less transfers	3,870,400		
	\$ 8,365,200		
Less certificates redeemed	237,100		8,128,100
Loan of August 19, 1861			
Coupon Bonds	\$74,880,050		
Less Bonds redeemed	457,350		74,422,700
Stock issued	\$35,389,450		
Less amount of transfers	10,211,550		25,177,900
Loan of December 24, 1861			
6% Call Certificates issued	\$69,006,870		
Less certificates redeemed	12,516,460		56,490,410
Loan of April 12, 1862 (approved Apr. 18, 1862)			
Coupon Bonds			2,818,100
Stock issued	\$ 418,550		
Less transfers	44,100		404,450
Lilanger Loan (French Loan) January 29, 1863			15,000,000
Loan of February 20, 1863			
8% Coupon Bonds			81,668,100
8% Stock issued	\$21,372,100		
Less transfers	6,459,300		11,912,800
7% Coupon Bonds			51,183,100
7% Stock issued	\$16,788,000		
Less amount transferred	4,029,900		12,758,100

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CONFEDERATE FINANCE

TABLE OF THE FUNDED DEBT OF THE CONFEDERATE STATES OF AMERICA-Continued

<i>Loan</i>	<i>Net Amount Issued</i>
Loan of March 23, 1863	
Coupon Bonds	
6% ^s issued \$16,740,300	
4% ^s issued 22,300	16,762,600
6% Stock issued \$ 5,023,800	
Less transfers 715,700	4,278,100
Loan of April 30, 1863	
Coupon Bonds	8,372,000
Loan of February 17, 1864	
20-yr. 4% Registered Bonds (second section)	
\$10,193,800	
Less transfers 14,900	10,183,900
30-yr. 6% Coupon Bonds (sixth section)	145,755,000
4% Call Certificates (fifth section)	65,380,000
20-yr. 6% Bonds (twelfth section)	6,000,000
6% Non-Taxable Certificates (fourteenth section)	38,045,000
4% Coupon Bonds (eighteenth section)	16,263,500
Stock (eighteenth section)	32,040,000
Loan of June 13, 1864 (amendatory act of May 15, 1864)	
Coupon Bonds	2,164,000
Loan of June 14, 1864 (amendatory of section 12 of act of February 17, 1864)	4,000,000
Loan of March 13, 1865 (superseded by the following loan)	
Loan of March 17, 1865	
Richmond Banks Loan	300,000
<i>Total</i>	\$712,046,400

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CONFEDERATE FINANCE

certificates of indebtedness, and other instruments of credit were adjudged worthless.¹²⁵

It might be concluded, therefore, that an adequate tax, levied throughout the existence of the Confederacy, would doubtlessly have aided to some extent in improving the Government's financial status. The decisive agent, however, in determining the stability or soundness of Confederate finance rested in the success or failure of the military. It was upon the failure of the armed forces to achieve their goal that Confederate finance collapsed despite the late attempt of Congress at extreme taxation.

The following table summarizes the total receipts derived from tariffs and taxes:

TABLE EXHIBITING THE AMOUNT OF TARIFFS AND TAXES
COLLECTED IN THE CONFEDERACY¹²⁶

	<i>Amount Collected</i>
Import Duties:	
Acts of Feb. 18, Mar. 15, and May 21, 1861 (payable in Treas. notes, specie, sterling exchange and interest coupons of bonds)	\$ 3,424,338.81
Export Duties:	
Act of Feb. 28, 1861 (payable in specie and interest coupons of \$15-Million Loan)	30,056.05
Taxes:	
Act of Aug. 19, 1861 (payable in Treas. notes)	17,446,736.28
Acts of Apr. 21, 1863, Feb. 17 and June 14, 1861	
Tax in Kind (valued at) \$ 62,000,000.00	
Tax payable in Treas. notes 118,845,744.57	180,845,744.57
Acts of Mar. 11 and Mar. 17, 1865	-----
Duties and Taxes collected in the Trans-	
Mississippi Dept. and not shown above	5,768,457.42

Total amount of tariffs and taxes collected	\$207,515,833.13

SEIZURES

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INFLATION IN THE CONFEDERATE STATES OF AMERICA, 1863-1865

SELECTED QUOTATIONS

"We cannot indicate the sad months in store for the South from now [December 1863] until the end better than by quoting the successive prices of a barrel of flour. Beginning the New Year, 1864, at \$200, it was \$500 in June, dropping then temporarily to \$300, only to rise to \$700 by Christmas, \$1000 a few weeks later, and \$1500 by March 20, 1865, after which it practically could not be bought at any price in Confederate money.

"Scarcity and impossible prices were wearing down not the courage but the will to war of the South. Moreover, as prices had risen the government had found it necessary, even in the preceding year [1863], to pass laws impressing property from farmers and others, setting the government's own price on what it took. This had aroused a store of opposition and created a new host of enemies and of disaffection on the score of States' Rights. In the last months of the war, however, prices became so high and the government so impoverished that it could not even give Confederate money for the lower prices at which it impressed goods but merely receipts and promises to pay, until at the end it owed those from whom it had taken property \$500,000,000."

Source: Adams, James Truslow. *America's Tragedy* (1934), p. 326, 349-350.

"Prices demanded for commodities had now [1864] become such that Confederate notes in denominations of less than five dollars were regarded as small change. Mrs. Jefferson Davis, in her 'Monsieur' concerning the Ex-President of the Confederacy, presents reliable information as to prices. In February, 1863; Bacon, \$6. lb.; Ham, \$7. lb.; Turkeys, \$40. each; Lighting gas, \$6. per thousand feet; Firewood, \$35. per cord; Board for a horse at the Richmond livery stable, \$300. per month, \$15. per day, \$5. per single feed. In March, Flour was \$300. per barrel; Fish, \$5. per lb. April 1st, 1864, Beans sold at \$75. per bushel; Tea, \$22. per lb.; Coffee, \$12.; Brown sugar, \$10.; Milk, \$4. qt. During March and April, 1865, the acme was reached. Haircut and shave, \$10.; An ordinary suit of clothes, \$2700.; Pair of cavalry boots, \$450.; Six yards of linen, \$1200.; One ounce of quinine, \$1700.; A pen-knife, \$125.; One cake of brown Windsor soap, \$50."

Source: Bradbeer, William West. *Confederate and Southern States Currency*

"The prices which obtained [1863-1864] were almost fabulous, and singularly enough there seemed to be no sort of ration existing between the values of different articles. I bought coffee at forty dollars and tea at thirty dollars a pound on the same day.

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"My dinner at a hotel cost me twenty dollars, while five dollars gained me a seat in the dress circle of the theatre. I paid one dollar the next morning for a copy of the Examiner, but I might have got the Whig, Dispatch, Inquirer, or Sentinel, for half that sum. For some wretched tallow candles I paid ten dollars a pound.

"I believe the highest price, relatively, I ever saw paid, was for a pair of boots. A cavalry officer, entering a little country store, found there one pair of boots which fitted him. He inquired the price. 'Two hundred dollars,' said the merchant. A five hundred dollar bill was offered, but the merchant, having no smaller bills, could not change it. 'Never mind,' said the cavalier, 'I'll take the boots anyhow. Keep the change; I never let a little matter of three hundred dollars stand in the way of a trade.'

"That was on the day before Lee's surrender, but it would not have been an impossible occurrence at any time during the preceding year. The money was of no little value that we parted with it gladly whenever it would purchase anything at all desirable. I carelessly paid five dollars for a little salt, at Petersburg, in August, 1864, and being thirsty drank my last two dollars in a half-pint of cider."

Source: Eggleston, George Gary. A Rebel's Recollections (1875), p. 83-84, 91, 92.

"That the Confederacy should depend largely upon paper money was inevitable. The measure used for currency, the issuance of other fiscal measures, and the readiness of the Congress to take the easiest road, led to the issue of immense quantities of treasury notes by which the Confederate government promised to pay a specified number of dollars to the bearer two years after the ratification of a treaty of peace between the Confederate States and the United States of America.' By 1864 the amount of these notes had reached \$1,000,000,000, though the United States greenbacks actually in circulation never exceeded \$32,000,000. While the gold value of these Confederate notes stood at 90 in 1862, they declined to 6.3 at the end of 1863 and as low as 1.7 in the early part of 1865. In some respects their history resembles that of the greenbacks; but the Confederate notes were never made legal tender and the whole situation as to the rarity of gold in the South, the absence of international trading in gold, and many other factors, makes comparison futile. There was a further factor of difference; in the South the money function was exercised by states, cities, and even private corporations. The resulting currency confusion may be suggested by the fact that postage stamps were used as money and that the currency of the United States was not only used at the South in private business but was even employed by the Confederate government (at the end of the war) to pay its soldiers.

Source: Randall, J. G. The Civil War and Reconstruction (1937), p. 351-352.

Julius W. Allen
Economics Section
October 6, 1941

